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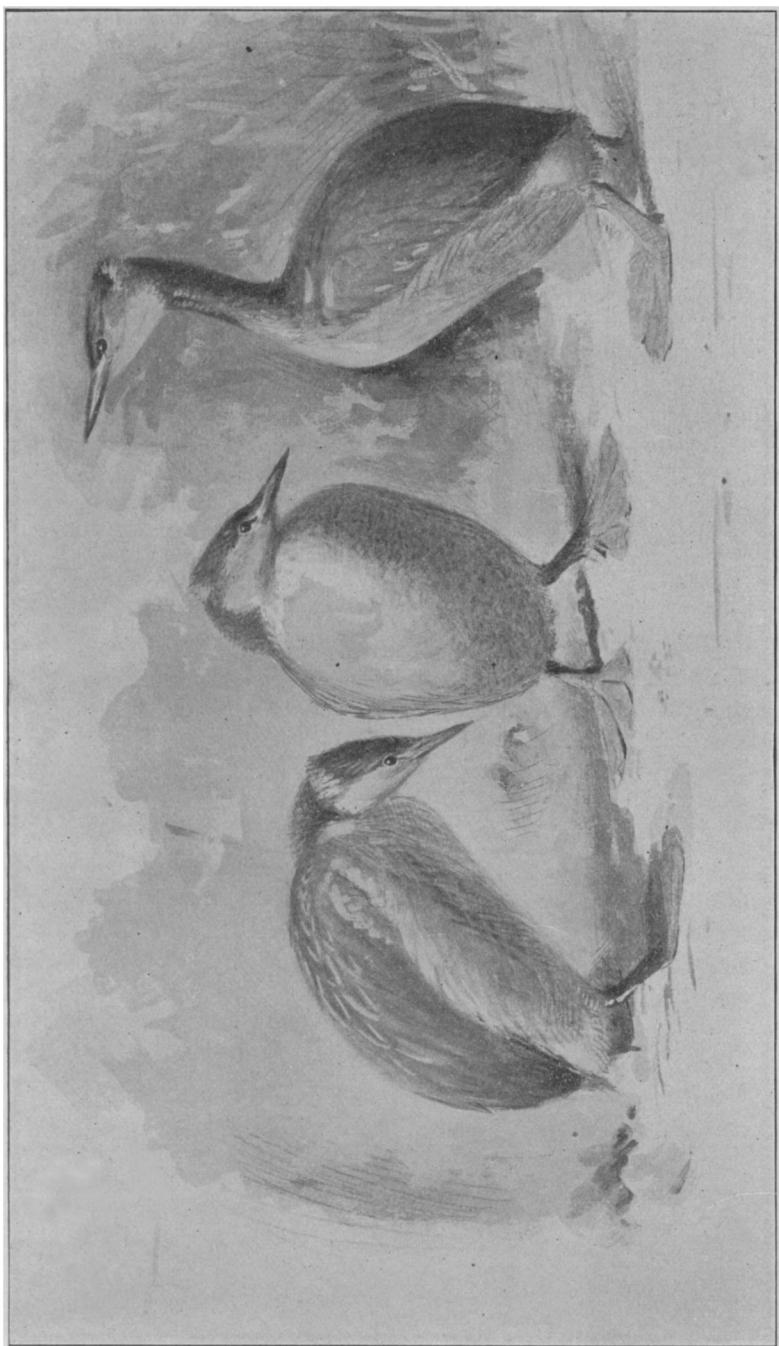
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HOLZCELL GREBE (*Colymbus holbœllii*) IN CHARACTERISTIC ATTITUDES

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NOTES ON THE HOLBOELL GREBE

(*Colymbus holbællii*)

BY ROBERT J. SIM.

Learning of the capture of a Holboell Grebe near Ashtabula, O., I set out on the first opportunity—Feb. 21, 1904—to see if I could procure the bird. I found it in the possession of Mr. J. J. Topper of Plymouth. This man said that the bird had been seen in the neighborhood for about a week when he took it in thinking to prevent it from starving. It seemed to have come down to a pond near by which was covered with a sheet of "glary" ice, and was unable to rise. Judging from the tracks in the snow as Mr. Topper said, the bird had been trying to reach some wild rose hips that still clung to the bushes. Before the grebe came into my possession strips of fresh fish and raw oysters had been offered it to no purpose, but a little piece of bread had been forced down its throat. This must have been about all the nourishment the bird had had for nearly two weeks. I found it exceedingly thin but able to run about. Bringing it home I kept it in a room where we saw much of each other every day. On the third day of May it was liberated on a small clear pond near Mills Creek, west of Jefferson. Thus it will be seen that this bird was kept in confinement for over two months, during which time opportunity for considerable study was afforded. Below its various occupations and actions are described as closely as my notes allow.

FOOD, FEEDING AND DRINKING.

On the first day strips of raw meat and fresh lettuce were placed in a dish of water before the grebe. These were poked tentatively, then fished out onto the floor but not eaten. The bird seemed inclined to flop himself into the dish. Towards night two small pellets of raw beef steak were forced down his throat. On the second day I placed a four inch wild fish (shiner?) in a dish filled with water. This was set on the floor in front of the bird. He gave the fish a slight poke whereupon it swam around violently. Making a quick thrust he caught it, grasping it crosswise with the bill—not impaling it. The fish then went through a course of pinching from head to tail, being hitched along from side to side in the bill. It was then turned about and gulped down head first. Later in the day three out of four strips of raw white-fish were eaten, each about the size of a man's finger. These the grebe bruised and shook until small fragments flew several feet around. At this time of the year live food was scarce, but we succeeded in finding a few small aquatic animals. By the twenty-seventh of February the grebe had eaten—all voluntarily—the following:

- 10 live gold fish—2 to 5 inches long.
- 2 pieces raw steak (taken from water).
- 1 four-inch wild fish.
- 2 large tad-poles.
- 7 medium sized dragon-fly larvæ.

In swallowing the large gold-fishes the birds jaws seemed to be distended laterally and he gulped so violently that the back of his head struck his back with a hollow "tunking" sound. This operation apparently jarred the fish past the sticking point. When very hungry the grebe swallowed the fishes alive. Of the cray fishes offered him only the small or soft ones were eaten, and no great relish was shown. Earth-worms, when their season came, were eaten with avidity, but raw beef-steak (lean) was the principal article of diet with the bird during his stay with us. This came to be taken from the hand, the floor, or water indifferently. In swallowing food the grebe always threw his head outside the normal in violent gulps, in this respect, as in most, differing from a contemporary coot captive which drew the food into his

throat simply by movements of the tongue and jaws. Unless the diver had already been filled up he invariably ate all the earth-worms and beetles which were placed in the coot's dish.

Only once did the bird really drink, I believe. This was on the first day of our companionship when I put him into a small tank of water. On this occasion he drank eagerly, immersing the bill for an instant, then tipping the head back after the manner of most birds, and repeating this many times.

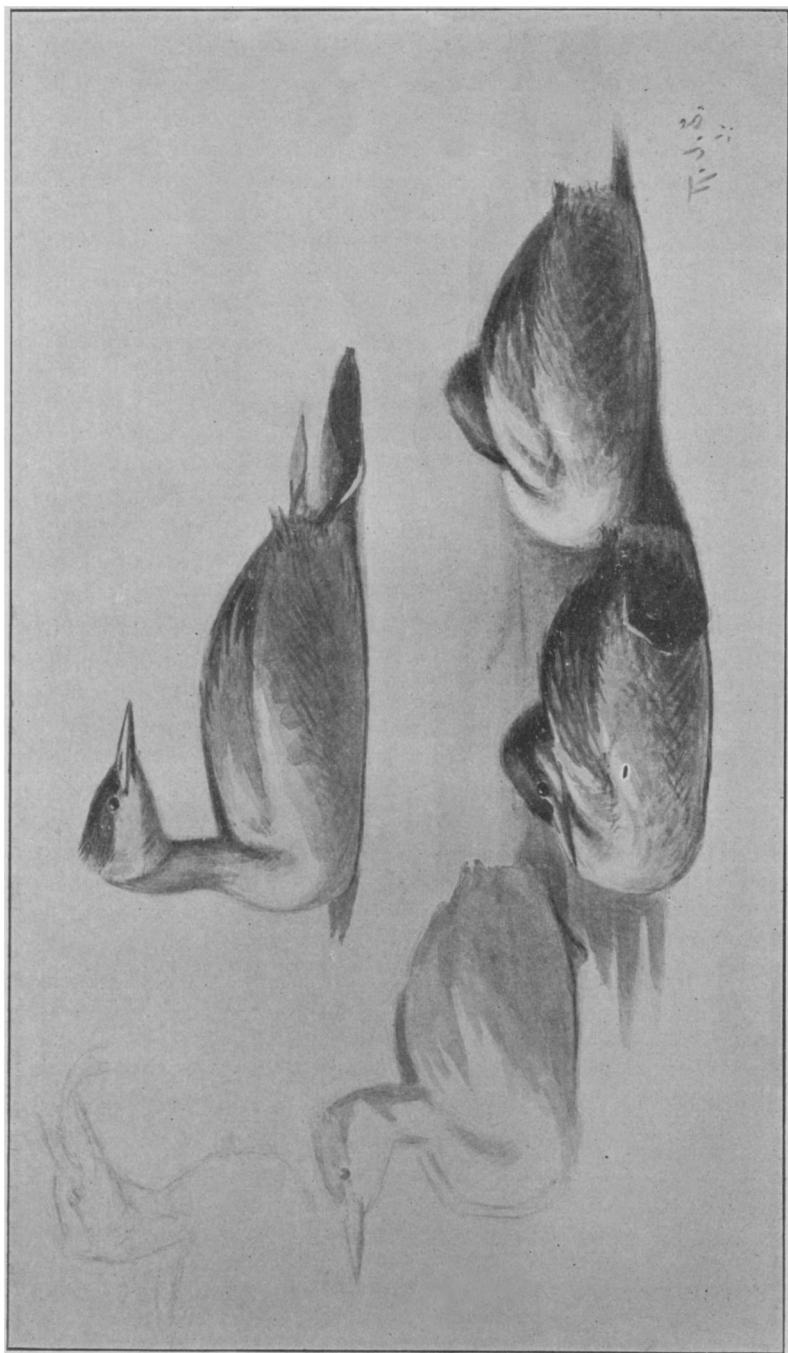
BATHING AND PREENING

It seems strange that a water-bird should be so indifferent to his natural element. When placed in a tank of clear water, warm or cold, our bird became very wet and soon tried to jump out. After his bath he looked snakey, so closely did the wet feathers adhere to his slender body. I do not think, however, that the under-lying down became much wet; for the bird usually managed to dry himself in an hour or two. A regular bath, such as he took at once after being released, consisted of much water treading, plunging and flapping. In fact the feathers could scarcely be raised one from another they were so completely soaked.

In drying and replacing the feathers the bill was thrust, open into the plumage, then closed and flicked outward, sending drops of water in all directions. The bill was worked over every part of the plumage except, of course, that of the head, and this was rubbed vigorously on the back and wings; or was scratched with the middle-toe nail of the rapidly vibrating foot. When I gently scratched or rubbed the back or sides of the grebe's head he immediately rubbed his head on his back as though the sensation that my scratching caused suggested his own method of producing it. When the bird's back was scratched no such movements were observed. In preening the feathers of the breast and belly he would stand nearly erect on his toes, retaining this position for several seconds, then would step along so as to rest on a dry spot. Often the bird stood up vigorously and frankly, flopping his wings for several seconds at a time. I say frankly because in contrast the coot had a timid, furtive way of doing it.

SLEEPING.

The grebe slept from dark until dawn, and generally for about an hour after a hearty meal. In roosting he ordinarily



20.
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HOLBÆLL GREBE (*Colymbus holbælli*) GOING TO SLEEP

lay on his keel, his feet projecting behind. As the bird became sleepy the feathers gradually fluffed out and the head settled down upon the back. Soon one foot would be seen to twitch slightly. This twitching and curling up of the toes would increase in violence until, with a preliminary rapid waving movement the foot was tucked under the wing which in turn was quickly covered with the flank feathers. Then the other foot was similarly hidden. Thus the feet were entirely concealed beneath the wings and feathers, not even the heel-joints showing.

While in this position the bird allowed me to lay back the feathers and then gently raise the wing. The flat, flipper-like foot was found to lie at full length against the warm, down-covered side of the body, the toes reaching nearly to the "arm-pit." After tucking his feet away one by one, he would draw his head far back and with a peculiar wagging motion, settle it amongst the feathers of the back. With this movement the bill was thrust quite out of sight among the feathers on either side of the neck, more commonly on the right side.

NOTES.

Early in the morning what seemed to be the song was heard. It consisted of a series of cough-like notes "*Cah.....Cah.....Cah*" the bird would say, shaking his head in a most painful manner. This song, if it could be called such, was given four or five times at dawn, and each consisted of four or five of the coughs. When frightened into a desire to inspire fear the grebe opened his mouth very wide (by moving both halves) and gave a rather loud scream which became grating, like the crow's song, towards the end. It somewhat resembled a whinner though, of course, was not so loud. A much more pleasing note than either of the above may be suggested by the syllables, "*Wit-tah*,"—not loud but rather high, the first part being higher than the second. It was usually given when the bird had just taken wing exercise, or had waddled across the room. It was often given, too, when the bird's back was stroked.

SWIMMING AND DIVING.

In swimming he sat rather deep, the tail and heels usually being submerged. At all times when folded the wings were

quite concealed under the side and flank feathers and humerals. In ordinary swimming the feet struck out alternately. The tarsi extended downward and outward. In diving the bird was not observed to spring forward in the common grebe manner, but rather let himself down very quickly as though drawing his head back through a hole. When it was below the surface I could scarcely realize that the creature before me was a bird, so slender was he and so swiftly did he dart about and shoot through the tangle of aquatic vegetation. It was amazing. The wings were entirely covered by the feathers and the feet struck out simultaneously at the sides, far astern. Their movements could scarcely be followed.

STANDING AND WALKING.

Contrary to the common belief in regard to grebes, this individual was never seen to rest upon his heels, though observed untiringly. The ordinary standing position was with the body somewhat inclined forward, the shoulders humped up, and the tarsi descending forward and outward on a slant—and so entirely free from the ground. The bird could stand for nearly a quarter of a minute or run ten or twelve feet before dropping to his breast. While vigorously preening or jabbing at his feathers he would sway around and sometimes had to take a step or two to regain balance. He seemed to become fatigued after standing for a moment, the strain being felt most, I think, in the toe-joints and in the muscles and tendons which flex the digits; for even with the tarsus sloping back as it did (see sketch) the toes were necessarily pressed upward to an unnatural degree. This conclusion was strengthened by the fact that the toe-joints became much swollen and developed corn-like protuberances. In pattering rapidly along the bird held his body in a semi-erect attitude and it swayed but little, on account of the quickness of the steps; but when walking slowly along he swung noticeably to the side whose leg for the moment supported his weight. He sometimes took food from the floor without first lying down, though he usually assumed the ventropodal position when feeding. When going under chairs and other low articles the bird progressed in short leaps, giving a spring with both legs together and coming down on his breast.

CURIOSITY, FEAR, ETC.

When curiosity and suspicion were aroused the bird's neck was upstretched very slim and the feathers of the body, too, were pressed close. The feet were drawn up under the body at the sides ready for a leap. The suspicious object was regarded intently with one eye at a time. When frightened and disturbed the bird either ran and tumbled to the darkest corner, or defended himself by delivering powerful blows with the nearly closed bill. During the first few days the bird bit me so often and so viciously that my hands were covered with scratches; but thereafter learned that it was useless to try to intimidate me thus. When the coot was let loose in the grebe's room a fight soon took place in which the gray fellow silently bit and scratched with bill and nail, while the grebe sat raining blows with his spear like bill. Their wings were raised threateningly but, I think, not used. Fearing that one might hack the other "into pieces small" I parted them and no more trouble followed during their week of companionship.

COLOR, SENSE, MEMORY, ETC.

During the first few days of the grebe's stay with us we fed him gold-fish which were taken from a dish by the use of a small net made of white mosquito bar. Soon, however, when the bird saw me pick up the net, he hurried over expecting, apparently, to see a gleaming fish drop out. And the moment I even drew a white handkerchief from my pocket he came toddling up with outstretched neck, eagerly watching every movement. Thus I could amuse my friends by making our pet come to calls or signals which, by themselves, would have no effect whatever.

A gray overcoat or a long yellowish gray smock had no terrors for the grebe, but let me enter the room with a broad brimmed gray hat or a scarlet or black skull cap on my head and he would make for the darkest corner. A dark red gown worn by my sister had a similar effect, though most dresses did not frighten him.

He would rest on the hand or lie contentedly on my knee as long as allowed to do so, or would climb onto my foot and let me raise him up on it. But all this was changed the moment that the bird was liberated. He swam at once to the farther side of the pond, and do what I would he would not

return nor could I approach within many feet of him. He was just as shy as any wild grebe and paid no attention to pieces of meat tossed out to him. He saw me then as he has seen men before. I was no longer the great mass standing over him. One is reminded of the little girl at the menagerie who couldn't see the elephant. There he was towering up before her; but he was so big that she could make nothing of him, so she still asked, "Where is the elephant?"

AN ORNITHOLOGICAL RECONNOISSANCE OF THE
GRAND RESERVOIR, OHIO, IN 1904.

BY W. F. HENNINGER

The fact that in former years the Grand Reservoir, in Mercer and Auglaize counties, Ohio, was an interesting place for birds, as also that in Dawson's recent investigations it received but scant attention, induced Mr. Karl Heilmann, of Tiffin, and myself to take a summer trip to the Reservoir, to find out what the conditions of bird life would be at the present time. Along the northern side of the Reservoir is the pike from St. Marys to Celina, the tracks of the Lake Erie & Western R. R. and the Western Ohio Traction Co. It is obvious that this part of the Reservoir showed nothing of interest concerning birds. The western part from Celina to the southeast showed us one interesting species, the Yellow-bellied Sapsucker, for the finding of this bird at this time of the year would tend to strengthen Mr. Oberholser's only breeding record for this species in the state. The basis of our work and supplies was Montezuma, on the southwest end of the Reservoir, a quiet little village, the monotony of which is changed only by the advent of a stranger, or an occasional dog fight in which most of the citizens participate with great glee. There we heard that the oil wells in the Reservoir had driven the nesting birds out quicker than anything else.

The Cormorants had ceased to nest since 1886, the Gadwall even before that. One of the natives told me he had not seen a young duck for the last four years, though Mallards and Blue-winged Teal were supposed to nest there still. This did